



GOVERNANCE FOR EFFICIENCY FIRST: “PLAN, FINANCE AND DELIVER” TEN NEAR-TERM ACTIONS THE EUROPEAN COMMISSION¹ SHOULD TAKE TO MAKE EFFICIENCY FIRST A REALITY

Introduction

What is Efficiency First?

“Efficiency First” (E1st) is the fundamental principle around which the development of the EU’s energy system should be designed. It means considering the potential for efficiency (including energy savings and demand response) in all decision-making related to energy, and prioritising efficiency improvements when they are more cost-effective or valuable than power generation, grids and pipelines and fuel supplies².

Applying this logic to all energy policy decisions can strengthen Europe’s economic recovery, lower fuel imports, build competitiveness, create jobs, improve air quality and bring down the costs of the transition to a low-carbon energy system.

The 2015 Paris Agreement will require the EU to rethink and recommit to a decarbonised energy system by 2050. Energy efficiency is crucial to meeting this goal and yet faces systematic and structural hurdles.

Realising E1st within the EU policy and legal framework will require the EU to make an appropriately high-level commitment to it, such that this central organising principle is properly integrated into models and impact assessments and is used to strengthen those laws that already target it. The principle must also be integrated into all other Energy Union policies and instruments, including funding decisions and infrastructure planning.

This memo sets out ten key actions that need to be taken by the European Commission in the near-term to put the EU on course to fully incorporate the E1st principle into energy policy and law – and thereby ensure the Energy Union operates to “Plan, Finance and Deliver” E1st.

The memo should be read in conjunction with the brochure “Efficiency First: A new paradigm for the European energy system – driving competitiveness, energy security and decarbonisation through increased energy productivity”.

How to embed Efficiency First in the Energy Union

1

Recognise E1st as a foundational policy of the Energy Union and publish a Commission Action Plan setting out the short, medium and long-term actions needed to implement, monitor and enforce E1st.

2

Embed E1st as a core principle in the EU assessment of how ambitious it can afford to be in meeting its Paris objectives.

3

Revise 2030 energy efficiency target to unlock the potential of energy efficiency to reduce the cost of meeting Europe's goals for energy security, decarbonization, growth and competitiveness.

PLAN

7

Adopt E1st as a central guiding principle for the allocation of EU funds (including EU technical assistance) and for the granting of State aid approval, and review how accounting rules treat energy-efficiency investment.

FINANCE

8

Extend the annual energy savings objective in the Energy Efficiency Directive beyond 2020, and remove the flexibilities that weaken its impact; strengthen measurement & verification and ensure periodic review of EE policies.

9

Incorporate E1st as a fundamental principle of energy-market design proposals with clearly defined mandatory roles for system operators and regulatory authorities to drive its implementation.

10

Mobilise and support local actors to implement E1st.

DELIVER

4

Incorporate E1st into the formulation of the National Energy and Climate Plans (NECPs), and annually assess progress on delivering E1st in the State of the Energy Union.

5

Fundamentals of the policy-making toolbox: Apply a societal (not a private) perspective, and value the multiple benefits of energy efficiency, when carrying out law, policy and project-related impact assessments.

6

Fundamentals of the policy-making toolbox: Ensure that energy demand projections used for infrastructure planning and project evaluation are consistent with EU climate and energy targets and the principle of E1st.

What does Efficiency First look like in the Energy Union (EU level)?

PRINCIPLES



PLAN
E1ST LEGALLY ENSHRINED AS A FOUNDATIONAL POLICY OF THE ENERGY UNION
E1ST EMBEDDED IN THE EU'S POST-PARIS REVIEW OF ITS DECARBONISATION TRAJECTORY

ACTION PLAN



PLAN
COMMISSION ACTION PLAN SETTING OUT THE SHORT, MEDIUM AND LONG-TERM ACTIONS NEEDED TO IMPLEMENT, MONITOR AND ENFORCE E1ST
ANNUAL PROGRESS REVIEW IN STATE OF THE ENERGY UNION

LEGASLATIVE STEPS



<p>PLAN APPLY SOCIETAL PERSPECTIVE IN IMPACT ASSESSMENTS + APPLY E1ST PRINCIPLE IN DEMAND PROJECTIONS USED FOR POLICY AND INFRASTRUCTURE PLANNING</p>	<p>FINANCE E1ST AS A GUIDING PRINCIPLE FOR THE ALLOCATION OF EU FUNDS, TECHNICAL ASSISTANCE AND STATE AID APPROVAL</p>	<p>DELIVER DELIVER EE VIA DEDICATED EE FRAMEWORK + MARKET DESIGN RULES + LOCAL ACTORS</p>
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MEMBER STATE ACTION PLANS



PLAN
E1ST PRINCIPLE INCORPORATED INTO FORMULATION OF NATIONAL ENERGY AND CLIMATE PLANS

Ten key actions for the European Commission³ to take

PLAN

Action 1: Recognise E1st as a foundational policy of the Energy Union and publish a Commission Action Plan setting out the short-, medium- and long-term actions needed to implement, monitor and enforce E1st.

- ✓ **Mainstreaming:** Recognise E1st as the most cost-effective route to achieving the five dimensions of the Energy Union, and give the Regulatory Scrutiny Board⁴ a mandate to mainstream E1st into EU legislation and policy instruments.
- ✓ **Action Plan for E1st:** Carry out a comprehensive assessment of the governance changes needed to implement and enforce the E1st principle, and publish as an “Action Plan for Implementing E1st”.
- ✓ **Assessment:** Annually assess progress on delivering this Action Plan as part of the State of the Energy Union.

Venue: *New Action Plan for E1st; Framework and State of the Energy Union*

Action 2: Embed E1st as a core principle in the EU assessment of how ambitious it can afford to be in meeting its Paris objectives

- ✓ **Decarbonisation trajectory:** Use the 2030 process to bring the EU’s long-term decarbonisation trajectory into line with its COP21 commitment, and revise the 2050 and 2030 greenhouse gas targets accordingly.
- ✓ **Sequencing of decisions:** Sequence decision-making on the greenhouse gas target appropriately to avoid it becoming an effective cap on the 2030 energy efficiency target.
- ✓ **Dynamic reinforcement:** Design post-2020 climate and energy governance to facilitate and not inhibit E1st, ensuring a dynamic and optimised reinforcing relationship between the EU Emissions Trading System (ETS), Effort Sharing Decision for emissions from non-ETS sectors (ESD), energy efficiency and renewables legislation.
- ✓ **Ratchet and review:** Enshrine E1st into the forthcoming ratchet and review mechanism for climate ambition so that it is systematically considered when adjusting the pace and scale of cost-effective decarbonisation across the whole economy.

Venue: *European Commission’s mid-century strategy (2050 plan) and 2030 greenhouse gas target*

Action 3. Revise 2030 EE target to unlock the potential of EE to reduce the cost of meeting Europe’s goals for energy security, decarbonisation, growth and competitiveness.

- ✓ **Upward revision:** Revise the EU’s 2030 energy efficiency target to 40% to most cost-effectively meet the EU’s Energy Union and Paris commitments.

Venue: *Energy Efficiency Directive and 2030 target revision*

Action 4. Incorporate E1st into the formulation of the National Energy and Climate Plans (NECPs), and annually assess progress on delivering E1st in the State of the Energy Union

- ✓ Incorporate E1st into the NECP process by:
 - **Template:** Proposing a binding EU template for plan-making and EU technical guidelines that make E1st a central organizing focus for NECPs.
 - **Demand projections:** Requiring Member States to include projections of energy demand to 2030 and 2050 that are in line with efficiency objectives, and to set out the potential for meeting this demand via investment in both supply side and demand reduction. The full costs and benefits of the investments required to reduce energy demand should be compared against supply-side alternatives, using a methodology assessed by the Commission. This comparative assessment, together with a regional assessment of needed infrastructure projects, should be the basis of national plans for infrastructure.
 - **Energy efficiency as infrastructure:** Treating efficiency as “infrastructure” within the formulation of NECPs.
 - **Indicators:** Including specific indicators that enable transparent and accountable EU oversight of national implementation of E1st, e.g.:
 - Absolute primary and final levels of energy consumption – progress to meeting efficiency targets.
 - Energy productivity (value added per industrial sector) – progress on improving competitiveness at a macroeconomic level.
 - Energy imports (volumes or ratio) – progress on improving energy security.
 - Sector level reporting – monitoring at a granular level, e.g. sector level energy productivity gains
 - Data on the removal of structural (institutional, financial, behavioural) barriers to EE
 - **Course correction powers:** Including a robust mechanism that gives the Commission powers to force national course correction towards E1st, e.g. through powers to reduce national discretion over the allocation of EU structural funds and direct funds to structural EE projects.
 - State of the Energy Union: Including an explicit assessment of progress on the E1st-related indicators in the annual State of the Energy Union.
- ✓ **Integrated approach to efficiency and heat decarbonisation:** Ensure that local, regional and national strategies to decarbonise the heat infrastructure integrate E1st as a fundamental principle governing decision-making by Member State, regional and local authorities. Develop roadmaps that assess the potential and costs of heat-demand reduction from energy-efficiency measures in buildings and industry and allocate the investments in infrastructure accordingly.

Venue: *Legal proposals and technical guidance for regional cooperation, indicators and template for NECPs; Energy Performance of Buildings Directive (EPBD); local / regional authorities*

FINANCE

Action 5. *Fundamentals of the policy-making toolbox: Apply a societal (not a private) perspective, and value the multiple benefits of energy efficiency, when carrying out law, policy and project-related impact assessments*

- ✓ **Discount rates:** Use DG Regio guidelines on cost/benefit analysis and discount rates when carrying out impact assessments for energy efficiency policies, i.e. use a societal rather than a private perspective when evaluating energy system costs.
- ✓ **Multiple benefits:** Quantify and monetise the multiple societal benefits of energy efficiency and factor them in to the selection of ambition level, policy instrument or investment.
- ✓ **Impact assessment:** Apply the same societal approach to the economic evaluation of any delivery instruments for energy efficiency (e.g. grants, soft loans).
- ✓ **Energy model and transparency:** Complete the work on the Joint Research Centre (JRC)-owned energy system model and ensure that it is supported by a transparency platform that makes public the underlying assumptions.

Venue: *Impact Assessment for the 2030 energy efficiency target; reviews of the Energy Efficiency and Energy Performance of Buildings Directives; JRC*

Action 6. *Fundamentals of the policy-making toolbox: Ensure that energy-demand projections used for infrastructure planning and project evaluation are consistent with EU climate and energy targets and the principle of E1st*

- ✓ **Aligned demand projections:** Ensure that demand projections used by the Commission and the European Networks of Transmission System Operators for electricity and gas (ENTSO-e/g) for all infrastructure planning and projects presented in 2016 are consistent and aligned with European medium- and long-term climate and energy targets, and with a full view of the role of efficiency and demand-side measures in managing future energy demand. This will be the basis from which governments plan to secure their remaining energy needs through supply-side investment. This should apply to the gas security of supply regulation, the methodologies for European, regional and Member States' system adequacy assessments and the allocation of funding for Projects of Common Interest (PCIs).
- ✓ **Better Regulation Scrutiny Board oversight:** Give the Better Regulation Regulatory Scrutiny Board a mandate to oversee consistency between energy demand projections used for infrastructure planning and project evaluation, and climate and energy targets.

Venue: *All Energy Union policies related to energy system planning; Better Regulation Scrutiny Board mandate*

Action 7. *Adopt E1st as a central guiding principle for the allocation of EU funds (including EU technical assistance) and for the granting of State aid approval, and review how accounting rules treat energy-efficiency investment*

- ✓ **Priority to energy efficiency:** All the EU redistributive policies and instruments should give priority to energy efficiency in their lending/distribution criteria. This includes European Structural and Investment Funds, which should be weighted toward energy efficiency investment, as is the European Fund for Strategic Investment (EFSI).
- ✓ **Conditionality for supply side funding:** When EU funding is provided for energy infrastructure under the Connecting Europe Facility, EFSI, European Energy Programme for Recovery, Trans-European Energy Networks (TEN-E) and finance from the European Investment Bank (EIB), Member States should be required to identify and submit financing plans to achieve E1st in their economies before they are allowed to access funding for supply-side infrastructure.
- ✓ **State Aid:** EU State Aid Guidelines should be revised and State aid Block Exemption reviewed to permanently increase energy efficiency exemptions to 100% of eligible costs (matching those for infrastructure). National efficiency funds should be redefined under State aid rules as economically sound entities pursuing a goal of economic viability and cost recovery rather than profit making. EU State aid guidelines should explicitly require DG Competition to include E1st in its assessment about the necessity and adequacy of State aid measures, in particular with regard to aid for generation adequacy and for energy infrastructure.
- ✓ **ETS revenues:** Revise ETS revenue recycling rules to put E1st, by ensuring that at least the first €3 from every tonne sold is spent on end-use efficiency to benefit households and businesses.
- ✓ **Classification of energy efficiency investments:** To facilitate the flow of investment towards E1st, create a new off-balance-sheet EUROSTAT classification of energy efficiency as "productive debt". To further support this objective, recognize efficiency investments as structural reforms under the Stability and Growth Pact, and create flexibility in how this debt is accounted⁵.
- ✓ **Accounting treatment of Energy Performance Contract (EPC) debt:** Review accounting treatment of ESCO-initiated EPC debt and amend the interpretation of International Financial Reporting Standards (IFRS) rules to recognise cash savings from energy-efficiency investment programmes and energy performance contracts in the "scoring" of investments⁶.
- ✓ **Technical and project development assistance:** Publish plans to strengthen technical and project development assistance via the European Investment Advisory Hub (EIAH) set up by the Commission and the EIB to help public promoters to structure their projects and to promote financing schemes with standard terms and conditions, notably in the area of buildings.

Venue: *Multiple*

DELIVER

Action 8. Extend the annual energy savings objective in the EED beyond 2020, and remove the flexibilities that weaken its impact; strengthen measurement & verification and ensure periodic review of energy efficiency policies.

- ✓ **Key efficiency provisions:** Recognise that achieving E1st depends critically on a strong suite of dedicated efficiency legislation. This requires, in particular:
 - The indefinite extension of the EED 1.5% cumulative end-use annual savings target.
 - Removing the “early action” and “future credits” exemptions to that 1.5% cumulative annual savings target.
- ✓ **Monitoring, verification, enforcement and review:** Establish clearer monitoring and verification guidelines to ensure accurate tracking of energy savings and enable enforcement and review over time. A template for Member States would ensure consistent reporting, both under the cumulative end-use energy savings target and as part of the NECPs.

Venue: Energy Efficiency Directive and 2030 target revision; NECPs

Action 9: Incorporate E1st as a fundamental principle of energy market design proposals with clearly defined mandatory roles for system operators and regulatory authorities to drive its implementation

- ✓ Ensure MDI proposals integrate E1st as a fundamental principle governing decision-making by the Commission, Member States, national regulatory authorities, Agency for the Cooperation of European Regulators (ACER), ENTSO-e and ENTSO-g on planning, investment and regulation within the internal energy market. This requires action in the following areas:
 - Wholesale power markets. Permit demand-side resources to compete on equal footing with generation, and give all consumers a legal right to participate in wholesale power markets, through an aggregator if necessary. Clearly define the rights and responsibilities of market participants – including the right of both existing and new market participants to be treated equally.
 - Regulation of Transmission System Operators (TSOs) and Distribution System Operators (DSOs). Revise the Infrastructure and Security of Supply Regulations to oblige TSOs and DSOs to consider all cost-effective options, including end-use energy efficiency and demand response, in developing resource adequacy assessments, investment plans and ten-year network development plans. Proposed new gas investments should be tested against alternatives – including demand reduction, demand response, and electrification. Plans must align with – and not contradict – delivery of 2030 and 2050 EU climate and energy targets. Oblige TSOs and DSOs to quantify the multiple benefits (including of energy security, reduction of energy poverty, etc.) of energy efficiency and demand response in their assessment of cost-effective investment options. Revenue structures must support rather than impede progress on E1st.
 - Consumer tariffs. Require network and retail tariffs to reflect actual consumer usage; fixed charges should be minimised to incentivize energy savings and support participation of demand response in market timeframes.
 - Role of regulators. Ensure that national regulators are independent and have adequate resources to oversee TSO and DSO delivery of E1st.
 - Role of ACER. ACER’s mandate and resources should be expanded as appropriate to ensure effective oversight and accountability of the delivery of E1st by ENTSO-e, regional institutions and to secure the independence of National Regulatory Authorities.

Venue: Electricity Market Design proposals

Action 10. Mobilise and support local actors to implement E1st

- ✓ **Role for cities:** Give cities, through the Covenant of Mayors, the right to participate in the formulation, delivery and evaluation of the NECPs, and in particular a formal role in delivering integrated and coherent urban planning of heating, cooling and electricity.
- ✓ **Technical assistance:** Increase the technical assistance available to cities to help them develop and aggregate a strong pipeline of investable efficiency projects, via EIB programmes such as JASPER and ELENA.
- ✓ **Financing for cities:** Alleviate pressure on local actors' finances by providing funding via the Smart Financing for Smart Cities initiative, and giving more detailed guidance on the accounting treatment of the debt and expected multiple benefits (and risks) of energy efficiency investment, to bring the accounting treatment of "service contracts" more into line with that of public-private partnerships.
- ✓ **Accounting rules:** Amend how IFRS rules are interpreted and recognise cash savings from energy-efficiency investment programmes and energy performance contracts in the "scoring" of investments
- ✓ **Local and regional utilities:** Support the development of local/regional utilities if considered relevant by local actors. These utilities could cover power, heat and transport, but have limited geographical scope.
- ✓ **Removal of barriers:** Require Member States to remove regulatory barriers to promote market entry of business models promoting services aimed at helping consumers achieve energy savings.
- ✓ **Prosumers:** Create a prosumer's right that guarantees the consumer's right to voluntarily contract with an aggregator or energy service provider without permission or interference from their supplier.

Venue: Covenant of Mayors, Energy efficiency directive, Energy performance of buildings directive, Smart Financing for smart cities strategy, NECPs template, Electricity Market Design Proposals



Endnotes

- 1 Many of the actions set out in this paper would require agreement from the European Council and European Parliament to become law, although it is the European Commission which has the right of initiative to put such proposals on the table. Since this paper is focused on the near-term it is addressed principally at the European Commission to make these proposals.
- 2 The phrase “energy efficiency” is used in this briefing to capture improvements across the entire energy system, including end-use efficiency, supply efficiency and system efficiency (for example, demand response), which lead to primary and/or final energy savings. “Efficiency First” refers to this broad definition of energy efficiency.
- 3 See note 1.
- 4 The Regulatory Scrutiny Board provides a central quality control and support function for Commission impact assessment and evaluation work. It examines and issues opinions on all the Commission’s draft impact assessments and of major evaluations and “fitness checks” of existing legislation. In principle, a positive opinion is needed from the Board for an initiative accompanied by an impact assessment to be tabled for adoption by the Commission. http://ec.europa.eu/smart-regulation/impact/iab/iab_en.htm
- 5 This would then merit a temporary exemption for government borrowing to finance energy efficiency programmes from the Medium-Term Budgetary Objective (Stability and Growth Pact), as has already been enacted for the European Fund for Strategic Investments. See Economic and Financial Committee (27 November 2015) “A Commonly Agreed Position on Flexibility within the Stability and Growth Pact”
- 6 Adjustment to the interpretation of IFRS rules to allow for applications for capital budget to cover EPCs to be considered in the context of the initial capital budget required net of the future savings to governments or businesses going forward. This would have the effect of EPCs being prioritised and scored higher in the approvals process compared to other standard infrastructure projects (in the case of governments) and other investments (in the case of businesses). Requiring this calculation to be undertaken would also mitigate the risk of misuse of EPCs by public and private entities.

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For more detail on the Efficiency First principle – what it is, and why and how it should underpin the Energy Union, please see the related briefing Efficiency First: A New Paradigm for the European Energy System – Driving Competitiveness, Energy Security and Decarbonisation through increased Energy Productivity.